

ULTRA-PORTABLE NOTEBOOKS

INTRODUCTION

If you're buying a notebook to use around the house or to save space on your desk, it might not matter how heavy it is or how long the battery lasts. If you want to use it when travelling, though, weight and battery life are prime considerations. A portable computer is no use if it's too heavy to carry or if the battery runs flat during a vital task.

We've gathered together nine ultra-portable notebooks that are ideal for travel. Most weigh no more than two kilograms, so they won't break your back, and with prices as low as £640 plus VAT they won't break the bank, either. We'll help you pick a notebook that'll fit your credit card as well as your hand luggage.

Alan Lu

PC systems and storage expert

alan@computershopper.co.uk



THE LIGHT BRIGADE

Selecting the perfect ultra-portable for life on the move shouldn't be a heavy decision. We test nine slim models so light you can take them anywhere

Choosing an... Ultra-Portable Notebook

When buying an ultra-portable notebook it's easy to be blinded by specifications, and weight figures in particular. It's important to pick a notebook that isn't too heavy and we've included the weight of each at the end of our reviews and in the table on pages 78-79. There are other factors that need consideration, though. In this buying guide we'll explain what else you should look for.

SIZE OF RELIEF

Today's everyday notebooks use a 15.4in display, but these are too large and heavy for an ultra-portable computer. Most notebooks in this month's test have a 12.1in, 13.3in or 14.1in widescreen display with a resolution of 1,280x800 pixels. The bigger displays won't show any more information than a 12.1in screen, but the larger the image they produce, the less tiring it is on the eyes. However, notebooks with a 12.1in screen can have a smaller, lighter case. Evesham's Lightbook is an exception; it has a non-widescreen 12in display with a resolution of 1,024x768. This gives you less room for programs and windows onscreen.

Apart from the Evesham, HP and Acer notebooks, all the computers here have glossy screens. The glossy coating increases contrast and colour saturation, but it also reflects more light. This can be distracting in offices with overhead fluorescent lighting. We've cast a critical

eye over the quality of each screen, and you'll find our comments in each review.

Most of the notebooks here are comparable in width and depth to a sheet of A4 paper, with a thickness of about three to four centimetres. We've included exact measurements in our table on pages 78-79, and our reviews explain which computers have batteries that add extra bulk and weight.

POWER TRIP

It doesn't matter how light your notebook is if the battery dies when you're halfway through your day's work. A good ultra-portable notebook should be able to run for at least three hours when away from a power socket. All but three of the notebooks in this group managed to exceed this time. Three of the notebooks here ran for over four hours on a single charge, which is impressive. Acer's TravelMate comes with two batteries: a bulky six-cell version for long trips, and a small three-cell model that takes up less space. We tested both. Bear in mind that strenuous tasks such as playing a DVD will drain your battery faster than simple web browsing or word processing.

Having an ultra-portable notebook doesn't mean that you have to settle for a cramped touch pad and keyboard. If you'll be typing a lot on your notebook, a spacious and comfortable keyboard with





This month

ACER TravelMate
3043WTMi

Page 72



EVESHAM
Lightbook

Page 72



FUJITSU SIEMENS
Amilo Si 1520

Page 72



HI-GRADE
Notino W3300-7200

Page 74



HP
Compaq nc6400

Page 74



MESH
Pegasus S271

Page 74



MSI MegaBook
S262-050UK

Page 75



ROCK Pegasus
P335-T72

Page 75



TOSHIBA Satellite
Pro U200

Page 75



responsive keys that give plenty of feedback is essential. The best keyboards in this group belong to the notebooks made by HP, Hi-Grade and Fujitsu Siemens.

When using a notebook on a desk it's easy to plug in a mouse, but this isn't usually an option when you're travelling. Therefore a reasonably large and accurate touch pad is vital. The best touch pad here belongs to HP's Compaq nc6400, which also has a touch stick. Touch sticks can be tricky to use at first, but some people prefer them.

SOCKET SCIENCE

Even a small notebook should have all the ports and connectors you need to attach peripherals and accessories. All this month's notebooks have at least three USB ports, and Fujitsu Siemens' Amilo has four.

With the exception of HP's Compaq nc6400, every notebook in this group has a four-pin FireWire port for connecting a DV video camera. Acer's TravelMate has a six-pin FireWire port, so you can connect some external hard disks without needing a separate power supply. All the notebooks in this group have D-sub sockets for connecting an external monitor, but only the Amilo has a DVI socket. This provides the optimum image quality without you having to adjust your monitor's settings. Three of the notebooks have an S-video port, which is useful for connecting a TV or projector.

Every notebook here has a memory card reader of some kind, but they don't all support every type of card. Check the table to see which notebooks can read which cards. Only a handful of the notebooks here have an S/PDIF port for connecting to a surround-sound amplifier.

SPEED LIMIT

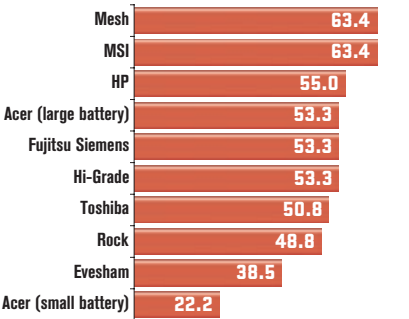
All but three of the notebooks in this test use an Intel Core 2 Duo processor. MSI's MegaBook uses an older Core Duo model, while Mesh's Pegasus uses a dual-core Turion 64 X2 TL-52 processor made by Intel's rival, AMD. Evesham's Lightbook,

with its Intel Core Solo chip, is the only notebook here without a dual-core processor.

If you'll be working on office documents, reading emails or surfing the web, any of these processors will be up to the job. If you want to undertake tougher tasks such as working with video files, though, pay close attention to our benchmark scores. The difference in performance between the Lightbook and the most powerful computers here is significant. We recommend choosing a notebook with 1GB of memory. The notebooks here with only 512MB of RAM were limited in some of our benchmark tests.

Watt's it all about? Battery life explained

Battery capacity in watt-hours



The number of hours that a notebook computer can run without mains power is dependent on two things: battery capacity and power consumption. If you compare the battery capacities listed here with the battery lives shown on page 76, you'll see that having a larger battery does not guarantee a longer battery life. Mesh's Pegasus has one of the largest batteries, but it used 20.9W of power in our tests. This led to an average battery life of a little over three hours. Evesham's Lightbook has one of the smallest batteries but used just 9.1W, so it was able to run for over four hours in our test.



ACER TravelMate 3043WTMi

★★★★★

£1,080 inc VAT

Acer's TravelMate 3043WTMi is one of the smallest and lightest notebooks in the group, but it's slightly more expensive than the rest.

FEATURES

The TravelMate's 1.75kg frame has no room for a DVD writer, but an external one is supplied. Together, the two weigh 2.15kg. Thanks to its six-pin FireWire 400 connection, the DVD writer doesn't need a separate power supply. There's a spacious 120GB hard disk, and the headphone port doubles as an S/PDIF socket for connecting a surround-sound amplifier.

The keyboard and touch pad feel cramped, but the keys and touch pad buttons give just the right amount of feedback. The non-glossy widescreen LCD looks dark and a little grainy, but it did manage to display a smooth gradient in our greyscale transition test.

The TravelMate has a couple of extra unique features. It has a built-in webcam and a Bluetooth VoIP handset that can be stored and recharged in the CardBus slot.

PERFORMANCE

The TravelMate's T5500 processor is the slowest Core 2 Duo chip in this group. It's powerful enough for most tasks, though. Like most notebooks in this group, its integrated graphics chip isn't suitable for 3D games.

The TravelMate is the only notebook here to include two batteries. The slim three-cell battery managed a meagre one hour and 33 minutes in our test, while the chunkier six-cell version scored a more usable two hours and 56 minutes. This larger battery protrudes from the back of the notebook, though.

VERDICT

The TravelMate is tiny and has some useful features, but it's also expensive and not particularly powerful. Fujitsu Siemens' Amilo is a better buy with its longer battery life, lower price and better display.

SUMMARY

- ✓ Compact design
- ✓ Spacious hard disk
- ✗ Short battery life

ULTRA-PORTABLE NOTEBOOK Intel Core 2 Duo T5500, 1GB RAM, 120GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD+/-RW +/-DL, 12.1in widescreen LCD, 1.8kg
PART CODE LX.TFQ06.044
SUPPLIER www.laptopsdirect.co.uk
DETAILS www.acer.co.uk



EVESHAM Lightbook

★★★★★

£1,019 inc VAT

The Lightbook is easily the lightest notebook in this group, but it feels fragile and is far slower than the other computers.

FEATURES

Evesham's Lightbook weighs just 1.25kg, making it one of the lightest ultra-portable notebooks we've seen. This is especially impressive because, unlike Acer's TravelMate, it has a DVD writer built into its chassis.

Apart from its weight, though, the grey plastic chassis leaves much to be desired. It looks ugly and flexes easily. It feels a little fragile, and we're not sure it would survive regular travel. The cursor keys and touch pad were too small for our fingers, but the touch pad is accurate and its clicky buttons feel just right. The hard disk is just 60GB.

The LightBook is the only notebook in the group without a widescreen display. The non-glossy 12.1in screen's resolution of 1,024x768 can feel cramped if you use a lot of programs at once or want to work on a large spreadsheet. Its backlight is a little uneven and images look slightly grainy. We also noticed subtle shifts in colour accuracy at different angles.

PERFORMANCE

The Lightbook is the only notebook here with a single-core processor, the Intel Core Solo U1400. With only 512MB of memory, its performance in our benchmarks was poor. Its score of 55 overall was half that of all but two of the other notebooks. It's suitable for office work and web browsing, but more demanding tasks will be slow. We were more impressed with its battery life. The Lightbook ran for four hours and 13 minutes in our test, behind only the MSI and Toshiba notebooks.

VERDICT

The Lightbook's long battery life and light chassis will be appealing if you often work on the move, but its performance is limited. Regular travellers will need to invest in a sturdy case to protect it, and this will add weight.

SUMMARY

- ✓ Very light; great battery life
- ✗ Disappointing keyboard; feels a little fragile
- ✗ Poor performance in Windows

ULTRA-PORTABLE NOTEBOOK Intel Core Solo U1400, 512MB RAM, 60GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD+/-RW +/-DL, 12.1in LCD, 1.3kg
PART CODE VOYLIGHTBOOKDEC06
SUPPLIER Evesham 08701 609500
DETAILS www.evesham.com



FUJITSU SIEMENS Amilo Si 1520

★★★★★

£810 inc VAT



The Amilo Si 1520 is a well-equipped notebook with a decent battery at a great price.

FEATURES

The Amilo is one of only two notebooks here with an S-video output and the only one with a DVI socket. Both are useful for connecting a projector, and the DVI port allows you to connect an external monitor without having to tweak its settings for the best image quality.

We were impressed by the quality of the Amilo's 12.1in widescreen display. Colours looked rich and bright, and both our greyscale and colour gradients were displayed with little banding. Only a greyish cast in white areas lets it down. The keyboard feels responsive and its keys give plenty of feedback. The cursor keys were too narrow for our fingers, but they are marked by raised ridges that make them easier to find when touch-typing. The small touch pad's buttons were a little unresponsive.

The optical S/PDIF output allows you to connect a surround-sound amplifier. The generous software bundle includes Adobe Photoshop Elements 4 and Premiere Elements 2.

PERFORMANCE

With 1GB of RAM and a speedy T5600 Core 2 Duo processor, the Amilo is one of the most powerful notebooks here. It performed well in all our 2D benchmarks, coming in second place overall with a score of 147. It's no good for games, though. Like most other ultra-portable notebooks in this group, its integrated graphics chip can't handle the latest 3D games.

The Amilo ran for three hours and 39 minutes in our test. This isn't as impressive as the Toshiba, MSI and Evesham notebooks, but it's enough to keep you working on the move.

VERDICT

We were impressed with the Amilo's useful selection of ports and speedy Windows performance. Unless you need the best possible battery life, it's a great buy.

SUMMARY

- ✓ Fast in Windows
- ✓ Generous software bundle; DVI port
- ✓ DVI, S-video and S/PDIF outputs

ULTRA-PORTABLE NOTEBOOK Intel Core 2 Duo T5600, 1GB RAM, 100GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD+/-RW +/-DL, 12.1in widescreen LCD, 2.0kg
PART CODE LKN:GBR-100100-012
SUPPLIER www.nice-pc.co.uk
DETAILS www.fujitsu-siemens.co.uk



HI-GRADE Notino W3300-7200

★★★★

£938 inc VAT

Hi-Grade's Notino W3300-7200 is fast in Windows and has a comfortable keyboard and touch pad, but is let down by a poor display and short battery life.

FEATURES

The Notino W3300-7200's sturdy matt black case is lined with glossy black panels. Like the Amilo, it has an S-video port for connecting to a projector or TV. The keyboard is well spaced and comfortable. The large touch pad is accurate and has a pair of responsive buttons.

The Notino has a larger screen than most other notebooks here. Its 13.3in display is easier on the eyes than the 12.1in displays, but we were disappointed by its image quality. A mottling effect was obvious even on the Windows desktop and made our colour and greyscale gradient tests look like pointillist paintings. It's not suitable for image editing.

PERFORMANCE

Equipped with 1GB of RAM and a T7200 Core 2 Duo processor, the Notino W3300-7200 sped through our benchmarks. Its score of 222 in our video-encoding test was the best in the group and its overall score of 145 was just a few points behind the front-runners.

The Notino W3300-7200 is the only notebook in the group with a dedicated graphics card, the 256MB ATI Mobility Radeon X1300. It ran our Doom 3 test at 11.8fps, so to play modern games you'll need to reduce the level of graphical detail.

We were disappointed by the Notino's battery life. It ran for just two hours and 26 minutes in our test, so it's not a good choice for working on the move.

VERDICT

The Notino is powerful and has a comfortable keyboard and touch pad, but its poor battery life and display make it hard to recommend.

SUMMARY

- ✓ Fast in Windows; can play 3D games
- ✗ Disappointing battery life
- ✗ Poor display

ULTRA-PORTABLE NOTEBOOK Intel Core 2 Duo T7200, 1GB RAM, 100GB hard disk, ATI Radeon Mobility X1300 graphics, DVD+/-RW DL, 13.3in widescreen LCD, 2.0kg
PART CODE W3300-7200
SUPPLIER Hi-Grade 020 8532 6111
DETAILS www.higrade.com



HP Compaq nc6400

★★★★

£954 inc VAT

HP's Compaq nc6400 has a large 14.1in display, but the downside is its increased weight and size.

FEATURES

The Compaq nc6400's 14.1in display has the same 1,280x800 pixel resolution as the smaller 12.1in displays, but its larger image will please those with failing eyesight. It doesn't have a glossy coating, images looked a bit grainy and the backlighting was slightly uneven. We noticed some coarseness in our colour gradient test, but our greyscale transition test was reproduced smoothly.

At 2.3kg, the nc6400 is the heaviest notebook here. However, you can remove the optical drive, bringing the weight down to 2kg. We expect all notebooks at this price to have a DVD writer, so we were disappointed to find a DVD/CD-RW combo drive inside the nc6400. It can be substituted with a DVD writer or even another hard disk, but only if you buy one of HP's proprietary Multibay II devices.

The nc6400 is also the only notebook in our group without a FireWire port. The large and well-spaced keyboard is comfortable to type on, although the key travel is a little short.

PERFORMANCE

With 1GB of RAM and a Core 2 Duo T5600 processor, the nc6400 fared consistently well in our benchmarks. Its overall score of 145 puts it near to the top of the group. It performed especially well in our multiple-application test, where its score of 148 was second only to that of Rock's Pegasus.

The nc6400's integrated Intel graphics chip isn't suitable for playing demanding 3D games. Its battery life of three hours and 13 minutes is good enough for mobile use.

VERDICT

The nc6400 is powerful, but it's let down by its size and weight. We're also disappointed that it doesn't include a DVD writer.

SUMMARY

- ✓ Large display
- ✗ No DVD writer or FireWire port
- ✗ Comparatively large and heavy

ULTRA-PORTABLE NOTEBOOK Intel Core 2 Duo T5600, 1GB RAM, 80GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD-ROM/CD-RW, 14.1in LCD, 2.3kg
PART CODE RM100ET
SUPPLIER www.dabs.com
DETAILS www.hp.co.uk



MESH Pegasus S271

★★★★

£821 inc VAT

Mesh's Pegasus S271 looks almost identical to MSI's MegaBook, but the similarity is skin-deep.

FEATURES

The Pegasus's chassis is almost identical to the one used by MSI's MegaBook. It feels sturdy and the large battery props up the keyboard at a comfortable angle. Its keyboard doesn't have as much travel as the MegaBook's, but it is still comfortable to type on. The touch pad is small and accurate, although its buttons are stiff.

The gloss-coated screen produces rich colours and deep blacks, and has plenty of contrast. Unfortunately, the Pegasus is another notebook in our group that couldn't produce a smooth gradient in the white areas of our greyscale transition test; the coarse results reminded us of corrugated cardboard. There was also noticeable banding in our colour transition test. Music lovers will want to invest in a good pair of headphones, as the speakers sound tinny and harsh; see our headphones Labs on page 118.

PERFORMANCE

The Pegasus is the only notebook in this test to use a processor made by AMD rather than Intel. Its Turion 64 X2 TL-52 chip produced a score of 107 points overall in our benchmarks, making it one of the three slowest computers in the group. It uses an ATI integrated graphics chip rather than the Intel ones used in most notebooks here, and ran our Doom 3 test at 2.3fps. This is marginally better than most in the group, but it's not good enough to play modern 3D games.

The Pegasus ran for three hours and two minutes in our light usage test. This is enough for working on the move, but MSI's MegaBook lasted an hour and 18 minutes longer.

VERDICT

Mesh's Pegasus S271 feels sturdy and has a comfortable keyboard, but its display is poor. Other notebooks here are more powerful, and many have better battery life.

SUMMARY

- ✓ Sturdy design
- ✗ Limited Windows performance
- ✗ Disappointing image quality

ULTRA-PORTABLE NOTEBOOK AMD Turion 64 X2 TL-52, 1GB RAM, 80GB hard disk, ATI Radeon XPress 1150 graphics, DVD+/-RW DL, 12.1in widescreen LCD, 2.1kg
PART CODE N/A
SUPPLIER Mesh Computers 08700 464747
DETAILS www.meshcomputers.com



MSI MegaBook S262-050UK

★★★★★

£765 inc VAT

MSI's MegaBook may look the same as Mesh's Pegasus, but it's a better notebook. It's not that powerful, but it does have a great battery.

FEATURES

Like the Pegasus, the MegaBook's large battery props up the keyboard at an angle that makes typing comfortable. Some of the keys are quite narrow, but each key provides good tactile feedback when typing.

The touch pad is small but accurate, although the small buttons look as if they've been etched out of the case and they feel stiff to the touch. Colours look rich and bright on the widescreen display, although we noticed some dithering in our greyscale and colour transition tests. At 60GB, the hard disk is smaller than most in the group.

PERFORMANCE

In a group dominated by Intel's new Core 2 Duo processors, the MegaBook is the only computer that uses an chip from the older Core Duo range. More importantly, though, only 512MB of memory is installed. This has a serious effect on the MegaBook's performance. It scored just 92 overall in our benchmarks and lagged behind every notebook other than the single-core Lightbook.

Like most notebooks here, the MegaBook uses an Intel integrated graphics chip that isn't up to playing the latest games. However, it's well equipped for working on the move. Its battery ran for a impressive four hours and 20 minutes, bettered only by Toshiba's Satellite.

VERDICT

At just £765 including VAT, the MegaBook is the cheapest notebook here. If you want an inexpensive notebook that can run for a long time away from mains power, this is a good choice. Otherwise, we'd recommend spending a bit more on the Fujitsu-Siemens Amilo.

SUMMARY

- ✓ Excellent battery life
- ✓ Inexpensive
- ✗ Slow in Windows

ULTRA-PORTABLE NOTEBOOK Intel Core Duo T2300, 512MB RAM, 60GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD+/-RW DL, 12.1in widescreen LCD, 2.1kg
PART CODE S262-050UK
SUPPLIER www.scan.co.uk
DETAILS www.msi.com.tw



ROCK Pegasus P335-T72

★★★★★

£999 inc VAT

Rock's Pegasus P335-T72 is the most powerful notebook in this group, but it's let down by its short battery life.

FEATURES

Rock's Pegasus is the only notebook here to include a USB digital TV tuner. You can record, watch and browse your favourite TV shows using Windows XP Media Center, but with no remote control you'll need to stick close to the computer. The 120GB hard disk gives you enough room to record plenty of shows.

The 13.3in widescreen LCD may not be as large as the HP notebook's 14.1in display, but it's big enough for watching films and TV programmes. It's bright, but grey areas have a slight blue tint. The S-video output allows you to show programmes on a TV or projector.

The keyboard feels comfortable, but we'd prefer it if the keys had a bit more travel. Users of keyboard short cuts will be annoyed that the Control and Function keys have been swapped over from their usual positions. The touch pad is small and accurate, but its small, stiff buttons don't provide much feedback.

PERFORMANCE

With 1GB of RAM and a T7200 Core 2 Duo processor inside, the Pegasus flew through our Windows benchmarks. It was easily the fastest notebook in most tests, but was beaten by a few points in the video-encoding benchmark. It should be able to handle demanding tasks for some time to come. Game fans should look elsewhere, though, as its Intel-integrated graphics chip can't run modern 3D games.

The Pegasus's battery ran for just two hours and 32 minutes, which severely limits working on the move.

VERDICT

The Pegasus is quick, but its battery life is poor. Fujitsu Siemens' Amilo is almost as powerful and has a better battery, and the money you save will enable you to buy a TV tuner.

SUMMARY

- ✓ Fast in Windows
- ✓ USB TV tuner and S-video port
- ✗ Disappointing battery life

ULTRA-PORTABLE NOTEBOOK Intel Core 2 Duo T7200, 1GB RAM, 120GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD+/-RW +/-DL, 13.3in widescreen LCD, 2.2kg
PART CODE P335-T72
SUPPLIER www.rockdirect.com
DETAILS www.rockdirect.com



TOSHIBA Satellite Pro U200

★★★★★

£900 inc VAT

Toshiba's Satellite Pro U200 has a fantastic battery and a nicely designed chassis, but it's curiously underspecified in other areas.

FEATURES

We've seen the Satellite Pro U200 before, but we still like its compact and sturdy chassis. It has an L-shaped hinge that lowers the height of the screen, making it more comfortable to use in cramped spaces such as an airline seat. There's also a jog dial for adjusting the volume.

The Satellite's keyboard isn't as spacious as that of Hi-Grade's Notino, but its keys are responsive if a little shallow. The touch pad is small and accurate, although its tiny buttons feel too soft. At this price, we'd expect a hard disk larger than 60GB.

White areas looked bright and clear on the widescreen LCD, although the backlighting is a little uneven near the bottom of the display. We spotted some slight banding in our greyscale and colour transitions tests, but this wasn't as noticeable as on Mesh's Pegasus.

PERFORMANCE

Although the Satellite is equipped with a T5500 Core 2 Duo processor, its performance is limited by having just 512MB of RAM. It scored a respectable 183 in our video-encoding test, but didn't do as well in our image-editing and multitasking tests. Its overall score of 113 is some way off the pace set by the Rock, Fujitsu Siemens, HP and Hi-Grade notebooks.

The Satellite isn't suitable for playing the latest 3D games, as its integrated graphics chip couldn't run our Doom 3 test. Its battery life is the best in this test, though. It ran for four hours and 40 minutes in our light use test.

VERDICT

If battery life is your only concern, this is the best notebook here, but its hard disk is small and it could do with more memory. Both can be upgraded, but we'd rather spend less on the more powerful Fujitsu Siemens Amilo.

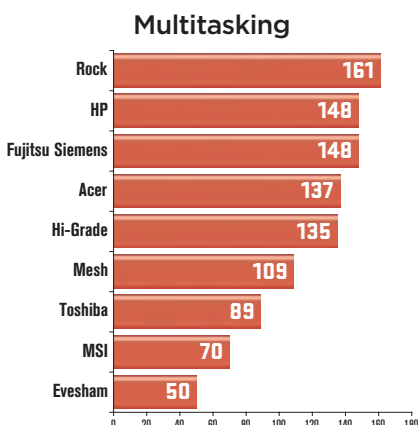
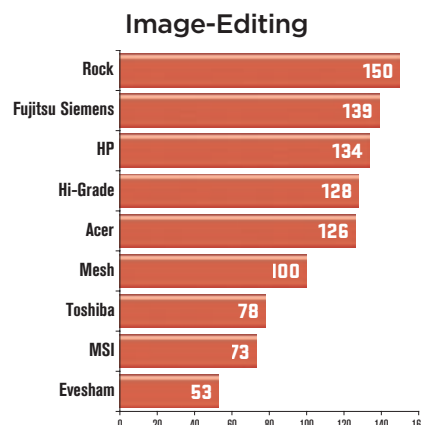
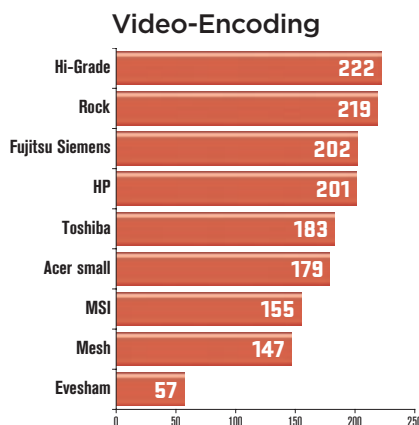
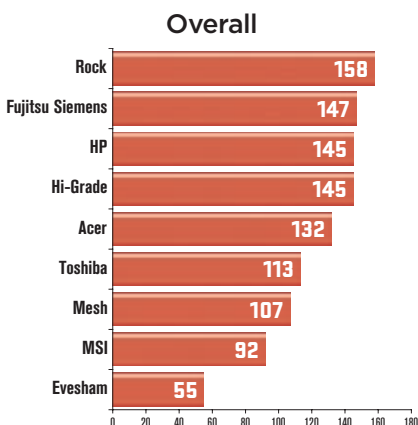
SUMMARY

- ✓ Excellent battery life
- ✓ Well-designed chassis
- ✗ Limited Windows performance

ULTRA-PORTABLE NOTEBOOK Intel Core 2 Duo T5500, 512MB RAM, 60GB hard disk, Intel Graphics Media Accelerator 950 graphics, DVD+/-RW DL, 12.1in widescreen LCD, 1.9kg
PART CODE PLUA1E-01800JEN
SUPPLIER www.savastore.com
DETAILS <http://uk.computers.toshiba-europe.com>

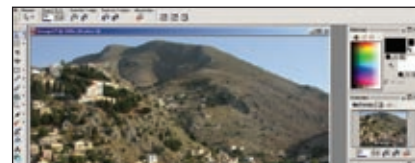
BENCHMARKS

2D Performance Shopper application tests



Computer Shopper's 2D benchmarks are designed to show how PCs stand up to the toughest tasks Windows can throw at them. Today's PCs have no problem running office applications such as Word and Excel, so we have chosen to focus our tests on areas where you could experience difficulties.

In the new version, there are four scripts. Encoding a short video to MPEG2 format is an extremely processor-intensive task that anyone interested in transferring home videos to DVD will have to tackle. Our image-editing test simulates a session of photo enhancement using Paint Shop Pro X, culminating with the composition of a panorama from a set of digital snaps. In our third test, a set of audio files is ripped to MP3 format. Finally, we have a multitasking test designed to test

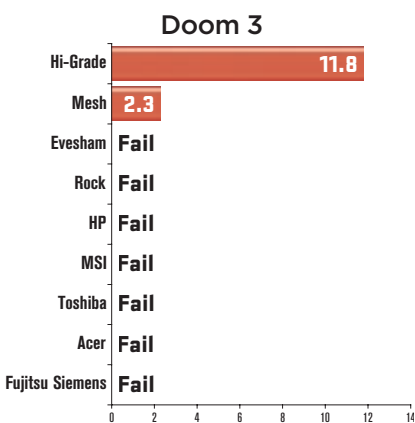


SETTINGS We run our application tests at the notebook's native resolution in 32-bit colour
WEB www.computershopper.co.uk

the real-life benefits of Hyper-Threaded and dual-core processors. This test compresses a DVD for playback on a Pocket PC at the same time as running our image-editing test.

Figures are relative to a reference Evesham Athlon 64 3500+, which scores 100 in all tests.

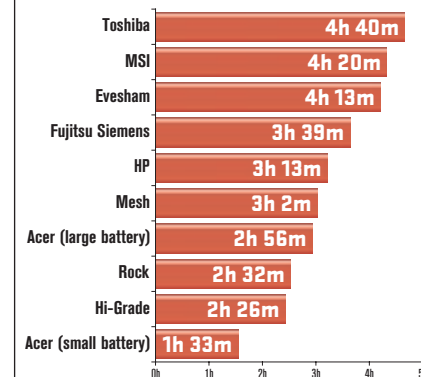
3D Performance Doom 3



SETTINGS 1,024x768 resolution, high quality, 4x AA **WEB** www.doom3.com

Our Doom 3 benchmark tests whether a PC has the power needed to play cutting-edge 3D games with ease. We've made the standard test harder, by including more outdoor scenes in it. A good score here indicates that a PC should cope with any graphically intense 3D game coming on to the market today.

Battery life Run time



Our battery test involves light browser use with the display at its middle brightness setting.

Labs verdict Ultra-portable notebooks

We were pleasantly surprised by the variety of ultra-portable notebooks submitted for this test. Most are small and light enough to make working on the move easy, and some are extremely good value.

Evesham's Lightbook is particularly slim and lightweight. Its battery life is good, but its poor keyboard and sluggish Windows performance make it difficult to recommend

to any but the most weighed-down traveller. At the other end of the scale, Rock's Pegasus is extremely powerful, but its battery isn't suitable for regular mobile use.

The best notebooks provide a balance between battery life and power. The pick of the group is Fujitsu Siemens' Amilo Si 1520. It's one of the fastest notebooks here, with plenty of ports, a comfortable keyboard and a



generous software bundle. Its battery will keep you computing for a respectable three-and-a-half hours and it costs just £810 including VAT. It's our Best Buy.



MANUFACTURER	ACER	EVESHAM	FUJITSU SIEMENS	HI-GRADE
Model	TravelMate 3043WTMi	Lightbook	Amilo Si 1520	Notino W3300-7200
Rating	★★★★	★★★	★★★★★	★★★
Processor	Intel Core 2 Duo T5500	Intel Core Solo U1400	Intel Core 2 Duo T5600	Intel Core 2 Duo T7200
Speed	1.66GHz	1.2GHz	1.83GHz	2GHz
Memory installed	1GB	512MB	1GB	1GB
Memory slots (free)	2 (0)	1 (0)	2 (0)	2 (0)
Max memory	4GB	2GB	2GB	2GB
BIOS	Acer	Phoenix	Phoenix	Phoenix
Dimensions (HxWxD)	38x304x234mm	43x271x244mm	45x304x228mm	40x318x234mm
Weight	1.8kg	1.3kg	2.0kg	2.0kg
Sound	RealTek HD	RealTek HD	Conexant HD	RealTek HD
Pointing device	Touch pad	Touch pad	Touch pad	Touch pad
DISPLAY				
Screen size	12.1in widescreen LCD	12.1in LCD	12.1in widescreen LCD	13.3in widescreen LCD
Graphics adaptor	Intel Graphics Media Accelerator 950	Intel Graphics Media Accelerator 950	Intel Graphics Media Accelerator 950	ATI Radeon Mobility X1300
Graphics outputs	D-sub	D-sub	DVI, S-video	D-sub, S-video
Graphics memory	224MB shared	128MB shared	128MB shared	256MB dedicated
Native resolution	1,280x800	1,024x768	1,280x800	1,280x800
STORAGE				
Hard disk (available)	120GB (106GB)	60GB (54GB)	100GB (93GB)	100GB (93GB)
Optical drive	DVD+/-RW +/-DL	DVD+/-RW DL	DVD+/-RW +/-DL	DVD+/-RW DL
Optical drive speeds	Lite On SSM-8515S (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Matshita UJ-842S (8X DVD-R, 8X DVD+R, 4X DVD+RW, 4X DVD-RW, 2.4X DVD+R DL, 5X DVD-RAM, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)	NEC AD-7540A (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM)	LG GMA-4082N (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)
PORTS AND EXPANSION				
USB2 ports	3	3	4	3
FireWire	1	1	1	1
Infrared port	Yes	No	No	No
Bluetooth	Yes	No	No	No
Networking	10/100/1,000, 802.11a/b/g	10/100, 802.11a/b/g	10/100, 802.11a/b/g	10/100/1,000, 802.11a/b/g
PC Card slots	1x CardBus	1x CardBus	1x ExpressCard/54	1x ExpressCard/54
Modem	Yes	Yes	Yes	Yes
Legacy ports	N/A	N/A	N/A	N/A
Memory card reader	Secure Digital, MultiMedia Card, Memory Stick, xD	Secure Digital, MultiMedia Card, Memory Stick	Secure Digital, MultiMedia Card, Memory Stick, xD	Secure Digital, MultiMedia Card
Other ports	Optical S/PDIF	N/A	Optical S/PDIF	N/A
EXTRAS				
Carrying case	No	No	No	No
Direct CD control	No	No	No	No
Operating system	Windows XP Professional Edition	Windows XP Home Edition	Windows XP Home Edition	Windows XP Home Edition
Operating system restore option	Restore partition	Restore disc	Restore disc	Restore disc
Software included	CyberLink PowerDVD 6, Norton Internet Security 2006, NTI CD & DVD Maker 7.5.0.2203	BullGuard Anti-virus 7, Roxio Easy Media Creator 9, Microsoft Works 8.5	Adobe Photoshop Elements 4.0, Adobe Premiere Elements 2.0, Microsoft Works & Entertainment Suite 2006, Norton Internet Security 2006	Sonic CinePlayer 1.51, Sonic RecordNow 7
Other standard accessories	Built-in 1.3MP webcam, Bluetooth VoIP phone, extra battery	Fingerprint reader	None	None
Optional extras (including VAT)	None	None	Three-year collect and return warranty £170	None
BUYING INFORMATION				
Company founded	1979	1983	1999	1986
Employees	6,000	418	Not disclosed	85
Technical support staff	150+	82	40	10
Technical support times	9am-5pm Mon-Fri	9am-5.30pm Mon-Fri, 9am-5.30pm Sat-Sun	9am-5.30pm Mon-Fri, 10am-2pm Sat	9am-5.30pm Mon-Fri
Parts and labour warranty	One year RTB	Two years onsite, third year RTB	One year collect and return	Two years RTB including accidental damage
Price including VAT	£1,080	£1,019	£810	£938
Price excluding VAT	£919	£850	£681	£798
Details	www.acer.co.uk	www.evesham.com	www.fujitsu-siemens.co.uk	www.higrade.com
Supplier	www.laptopsdirect.co.uk	Evesham 08701 609500	www.nice-pc.co.uk	Hi-Grade 020 8532 6111
Part number	LX.TFQ06.044	VOYLIGHTBOOKDEC06	LKN:GBR-100100-012	W3300-7200

HP	MESH	MSI	ROCK	TOSHIBA
Compaq nc6400	Pegasus S271	MegaBook S262-050UK	Pegasus P335-T72	Satellite Pro U200
★★★	★★★	★★★★	★★★★	★★★★
Intel Core 2 Duo T5600	AMD Turion 64 X2 TL-52	Intel Core Duo T2300	Intel Core 2 Duo T7200	Intel Core 2 Duo T5500
1.83GHz	1.6GHz	1.66GHz	2GHz	1.66GHz
1GB	1GB	512MB	1GB	512MB
2 (1)	2 (1)	2 (1)	1 (0)	2 (1)
4GB	2GB	2GB	2GB	4GB
HP	AMI	AMI	AMI	Toshiba
43x337x246mm	38x307x244mm	38x307x244mm	45x323x230mm	45x320x230mm
2.3kg	2.1kg	2.1kg	2.2kg	1.9kg
SoundMax HD	RealTek HD	RealTek HD	RealTek HD	SoundMax HD
Touch pad and touch stick	Touch pad	Touch pad	Touch pad	Touch pad
14.1in widescreen LCD	12.1in widescreen LCD	12.1in widescreen LCD	13.3in widescreen LCD	12.1in widescreen LCD
Intel Graphics Media Accelerator 950	ATI Radeon XPress 1150	Intel Graphics Media Accelerator 950	Intel Graphics Media Accelerator 950	Intel Graphics Media Accelerator 950
D-sub	D-sub	D-sub	D-sub, S-video	D-sub
224MB shared	128MB shared	128MB shared	224MB shared	128MB shared
1,280x800	1,280x800	1,280x800	1,280x800	1,280x800
80GB (74GB)	80GB (72GB)	60GB (54GB)	120GB (107GB)	60GB (56GB)
DVD-ROM/CD-RW	DVD+/-RW DL	DVD+/-RW DL	DVD+/-RW +/-DL	DVD+/-RW DL
Matshita UJDA775 (24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM)	LG GMA-4082N (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)	LG GMA-4082N (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 2.4X DVD+R DL, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Sony DW-Q520A (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Matshita UJ-842S (8X DVD-R, 8X DVD+R, 4X DVD+RW, 4X DVD-RW, 2.4X DVD+R DL, 5X DVD-RAM, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)
3	3	3	3	3
0	1	1	1	1
No	No	No	No	No
Yes	Yes	Yes	No	Yes
10/100/1,000, 802.11a/b/g	10/100/1,000, 802.11a/b/g	10/100/1,000, 802.11a/b/g	10/100/1,000, 802.11a/b/g	10/100, 802.11a/b/g
1x CardBus	1x ExpressCard/54	1x ExpressCard/54	1x CardBus	1x CardBus
Yes	Yes	Yes	Yes	Yes
N/A	N/A	N/A	N/A	N/A
Secure Digital, MultiMedia Card	Secure Digital, MultiMedia Card, Memory Stick	Secure Digital, MultiMedia Card, Memory Stick	Secure Digital, MultiMedia Card, Memory Stick	Secure Digital, MultiMedia Card, Memory Stick, xD
N/A	N/A	N/A	N/A	N/A
No	Yes	Yes	Yes	No
No	No	No	No	Yes
Windows XP Professional Edition	Windows XP Home Edition	Windows XP Home Edition	Windows XP Media Center Edition 2005	Windows XP Professional Edition
Restore partition	Restore partition, restore disc	Restore partition, restore disc	Restore disc	Restore partition, restore disc
InterVideo WinDVD 5, Norton Internet Security 2006	CyberLink DVD Solution 2.0	CyberLink PowerDVD 6, PowerProducer 2 Gold, Power2Go 3, PowerDirector 3	BullGuard Anti-virus 6.1, Microsoft Works 8.5, Roxio Easy Media Creator 7, Sonic Cineplayer 2.6	InterVideo WinDVD Creator 2 Platinum, InterVideo WinDVD 5, Microsoft Office OneNote 2003, Microsoft Works and Entertainment Suite 2006
Fingerprint reader	None	USB optical mouse	USB digital TV tuner	Fingerprint reader
Onsite three-year warranty £129, docking station £112, extra battery £100	None	None	None	None
1939	1987	1986	1992	Notebook division in 1985
140,000	195	16,000	Not disclosed	Not disclosed
Not disclosed	28	9	6	Not disclosed
8.30am-6pm Mon-Fri	9am-5pm Mon-Fri	9am-5.30pm Mon-Fri	9am-5pm Mon-Fri, 10am-2pm Sat	8am-6pm Mon-Fri
Three years collect and return	Two years collect and return	First year collect and return, second year RTB	Three years collect and return	One year collect and return
£954	£821	£765	£999	£900
£811	£680	£640	£850	£761
www.hp.co.uk	www.meshcomputers.com	www.msi.com.tw	www.rockdirect.com	http://uk.computers.toshiba-europe.com
www.dabs.com	Mesh 08700 464747	www.scan.co.uk	Rock 08456 880501	www.savastore.com
RM100ET	N/A	S262-050UK	P335-T72	PLUA1E-01800JEN